

Amendments to the Claims:

The listing of claims will replace all prior versions and listings of claims in the application:

5 **Listing of Claims:**

Claim 1 (previously presented): A method for program debugging, the method comprising:

- 10 setting a plurality of breakpoints corresponding to a plurality of events in an implementation under test, each event being a test executed to a peripheral device and taking a general processing path when the peripheral device is working well or an error processing path when the peripheral device is in an error state;
- executing the implementation under test for outputting a diagnosis code of a breakpoint;
- 15 resetting a parameter to simulate the peripheral device being in the error state throughout execution of the event corresponding to the diagnosis code; and
- executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path.

- 20 Claim 2 (previously presented): The method of claim 1 further comprising:
- after executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path, for making the implementation under test make all events undergo the error processing path, repeating the steps of executing the implementation under

test for outputting the diagnosis code of the breakpoint, resetting the
parameter of the event corresponding to the diagnosis code, and executing
the event corresponding to the diagnosis code according to the reset
parameter for making the event undergo the error processing path.

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Claim 3 (original): The method of claim 1 wherein the breakpoints are set ahead of
program codes of the corresponding events.

Claim 4 (original): The method of claim 1 wherein the breakpoints are set after
10 program codes of the corresponding events.

Claim 5 (canceled)

Claim 6 (previously presented): The method of claim 1 wherein the error processing
15 path produces an audible tone.

Claim 7 (previously presented): The method of claim 1 wherein the error processing
path causes a system reset.

20 Claim 8 (previously presented): The method of claim 1 wherein the error processing
path causes a system execution interrupt.

Claims 9-16 (cancelled)

Claim 17 (previously presented): The method of claim 1 further comprising:

executing the implementation under test until the diagnosis code of the
breakpoint matches a predetermined diagnosis code before resetting the
parameter of the event corresponding to the diagnosis code, and executing
the event corresponding to the diagnosis code according to the reset
5 parameter for making the event undergo the error processing path.

Claim 18 (previously presented): A method for program debugging, the method
comprising:

10 setting a plurality of breakpoints corresponding to a plurality of events in an
implementation under test, each event being a test executed to a peripheral
device and taking a general processing path when the peripheral device is
working well or an error processing path when the peripheral device is in an
error state;

setting a parameter to simulate that the peripheral device is working well
throughout execution of the implementation under test;
15 executing the implementation under test according to the parameter for
outputting a diagnosis code corresponding to each breakpoint;
for each breakpoint, determining whether the diagnosis code matches a user
defined diagnosis code; and

resetting the parameter to simulate that the peripheral device is in the error state
20 and executing the event corresponding to the diagnosis code according to
the reset parameter for making the event undergo the error processing path
when it is determined that the diagnosis code matches the user defined
diagnosis code.

Claim 19 (previously presented): The method of claim 18 further comprising
continuing execution of the implementation under test to a next breakpoint
without resetting the parameter when it is determined that the diagnosis code
5 does not match the user defined diagnosis code.

Claim 20 (new): A method for program debugging, the method comprising:
setting one or more breakpoints corresponding to one or more events of a
plurality of events in an implementation under test, each one or more event
10 being a test executed to a peripheral device and taking a general processing
path when the peripheral device is working well or an error processing path
when the peripheral device is in an error state;
executing the general processing path of the one or more event by resetting a first
parameter, and outputting a first diagnosis code of the one or more
15 breakpoints;
executing the error processing path of the one or more event by resetting a
second parameter, and outputting a second diagnosis code of the one or
more breakpoints; and
debugging the program according to the first and second diagnostic codes.

20 Claim 21 (new): The method of claim 20 further comprising executing both the
general processing path and the error processing path of all events of the plurality
of events.